

Team Game Tournament Instructions

This learning activity appeals to many different types of learner including the cooperative and the competitive learner.

Step 1 Divide the class into teams of four or five. A class of 29 would have 5 teams of 5 and one team of 4.

Step 2 Distribute the Practice version of the test to each student and instruct them to answer the questions cooperatively as a team, ensuring that all team members understand how each answer was obtained. The intention is to lift the overall team performance.

Step 3 Display a copy of the answers on the OHP or data projector and get each team to check their answers and resolve any issues with their answers.

Step 4 Ask the students to sort their team on the basis of their understanding of the topic from very good understanding (A students) to poor understanding (E students). The team of 4 students will only have A to D students.

Step 5 Regroup and seat all of the A students in one area of the room, B students in another area etc.

Step 6 Give out the Test version questions to each student and instruct them to individually answer the questions under formal test conditions.

Step 7 Display a copy of the answers on the OHP or data projector and get each student to mark their answers and then to rank themselves amongst the group of students they are grouped with. That is, the A students will rank themselves from best to worst score. The student with the best score is given a score of 5 points while the student with the lowest score is given a score of 1 point. Students with equal scores receive the same number of points (e.g. the points distribution could be 5, 4, 4, 4, 1 if three students have the same score). If there are only four students in a group, the scores will range from 5 to 2 points.

Step 8 The students recombine into their original teams and total their scores with the largest score winning. Any team with less than 5 students adds the average grade for the team to their score.

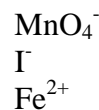
Redox Team Game Tournament:-Practice

1. For each of the following reactions, decide :-

- what substance has been oxidized
- what substance has been reduced
- what substance is the oxidizing agent
- what substance is the reducing agent

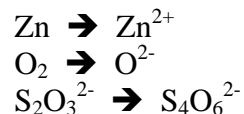


2. What products are formed when the following substances react.

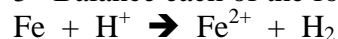


3. For each substance above, write the colour of the reactant and the product

4. Use oxidation numbers to decide whether oxidation or reduction has occurred in the following examples.



5. Balance each of the following redox equations



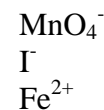
Redox Team Game Tournament:-Practice

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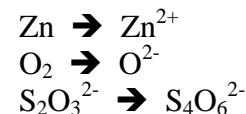


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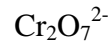
Redox Team Game Tournament:-Test

1. For each of the following reactions, decide :-

- what substance has been oxidized
- what substance has been reduced
- what substance is the oxidizing agent
- what substance is the reducing agent

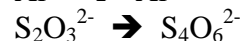
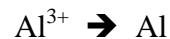


2. What products are formed when the following substances react.

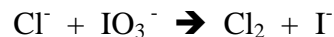


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5. Balance each of the following redox equations



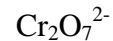
Redox Team Game Tournament:-Test

1. For each of the following reactions, decide :-

- what substance has been oxidized
- what substance has been reduced
- what substance is the oxidizing agent
- what substance is the reducing agent

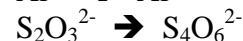
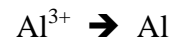


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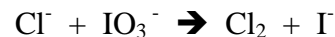
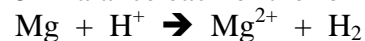


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4. Use oxidation numbers to decide whether oxidation or reduction has occurred in the following examples.



5. Balance each of the following redox equations

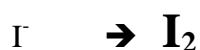
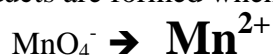


Redox Team Game Tournament:-Practice Answers

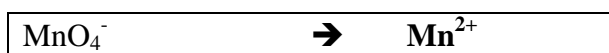
1.

$\text{CuO} + \text{C} \rightarrow \text{Cu} + \text{CO}$		$\text{Zn} + 2\text{H}^+ \rightarrow \text{Zn}^{2+} + \text{H}_2$	
a. what substance has been oxidized	C	a. what substance has been oxidized	Zn²⁺
b. what substance has been reduced	CuO	b. what substance has been reduced	H⁺
c. what substance is the oxidizing agent	CuO	c. what substance is the oxidizing agent	H⁺
d. what substance is the reducing agent	C	d. what substance is the reducing agent	Zn²⁺

2. What products are formed when the following substances react.

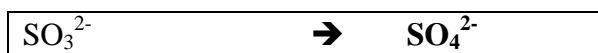


3. For each substance above, write the colour of the reactant and the product



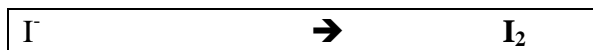
Purple

Colourless (pale pink)



Colourless

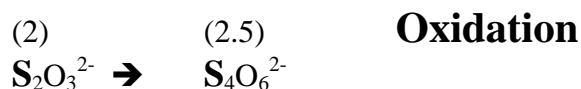
Colourless



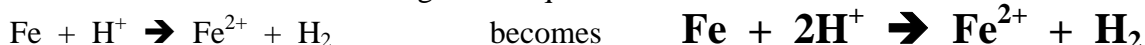
Colourless

Yellow / brown

4. Use oxidation numbers to decide whether oxidation or reduction has occurred in the following examples.



5. Balance each of the following redox equations

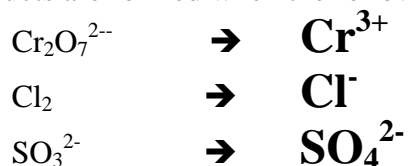


Redox Team Game Tournament:-Test Answers

1.

$\text{Fe} + 2\text{H}^+ \rightarrow \text{Fe}^{2+} + \text{H}_2$		$\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$	
a. what substance has been oxidized	Fe^{2+}	a. what substance has been oxidized	Fe^{2+}
b. what substance has been reduced	H^+	b. what substance has been reduced	H^+
c. what substance is the oxidizing agent	H^+	c. what substance is the oxidizing agent	H^+
d. what substance is the reducing agent	Fe^{2+}	d. what substance is the reducing agent	Fe^{2+}

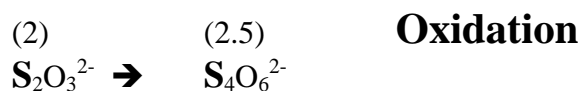
2. What products are formed when the following substances react.



3. For each substance above, write the colour of the reactant and the product

MnO_4^-	\rightarrow	Mn^{2+}
Purple		Colourless (pale pink)
SO_3^{2-}	\rightarrow	SO_4^{2-}
Colourless		Colourless
I^-	\rightarrow	I_2
Colourless		Yellow / brown

4. Use oxidation numbers to decide whether oxidation or reduction has occurred in the following examples.



5. Balance each of the following redox equations

